

REMARKS

I. PRELIMINARY REMARKS

Claims 1 and 13 have been amended. No claims have been canceled. Claims 30-38 have been added. Claims 1-38 remain in the application. Reexamination and reconsideration of the application, as amended, are respectfully requested.

Applicant notes with appreciation that claims 22-29 have been allowed.

Applicant also wishes to thank the Examiner for the courtesy of a telephonic interview conducted with the undersigned representative on July 6, 2005. During the interview, the Examiner indicated that claim 1, as amended above, appeared to be patentable over the applied reference. The Examiner also indicated that the actual patentability determination would be made after the present amendment was filed and that the amendments to claim 1 appear to raise "new issues."

II. BRIEF DESCRIPTION OF AN EXEMPLARY EMBODIMENT

The present inventions, as defined by claims, are directed generally to antennas that may be used in, for example, implantable medical devices. As illustrated for example in Figure 1, a spinal cord stimulator housing in accordance with one embodiment of a present invention includes a metal portion 20 and a dielectric portion 30. A folded antenna 60 is located within the dielectric portion 30. One end of the antenna 60 is connected to a receiver circuit. The receiver circuit has a ground reference that is connected to the housing metal portion 20.

III. PRIOR ART REJECTION

A. The Rejection

Claims 1-21 have been rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 6,147,652 to Sekine ("the Sekine patent"). The rejection under 35 U.S.C. § 103 is respectfully traversed with respect to the claims as amended above. Reconsideration thereof is respectfully requested.

B. Discussion

The Sekine patent discloses a variety of antennas with bent shapes that are carried on conductor plates. As discussed during the interview, the Sekine patent fails to teach or suggest the combination of "an implantable medical device housing including a conductive, metal housing portion defining an internal volume and a dielectric housing portion defining an internal volume" and "[a] monopole RF antenna [that] has an elongate form which is folded at least once and conformed inside the internal volume defined by the dielectric housing portion," as called for in independent claim 1. Nor does the Sekine patent teach or suggest connecting the Sekine transmitter/receiver circuit's ground reference to the metal portion of a housing that includes a metal portion and a dielectric portion, as is also called for in the combination defined by independent claim 1.

Similarly, with respect to independent claim 13, applicant respectfully submits that the Sekine patent fails to teach or suggest an "antenna [that] has an elongate form which is folded at least once and conformed inside the internal volume defined by [a] dielectric housing portion" and that the "antenna is connected to an internal transmitter/receiver circuit having a ground reference, which ground reference, in turn, is connected to [a] metal housing portion which acts as a ground plane."

As the Sekine patent fails to teach or suggest the respective combinations of elements recited in independent claims 1 and 13, applicant respectfully submits that the rejection of claims 1-21 under 35 U.S.C. § 103 should be withdrawn.

IV. NEWLY PRESENTED CLAIMS 30-37

Newly presented claims 30-32 respectively depend from independent claims 1, 13 and 22 and, therefore, are patentable for at least the same reasons as claims 1, 13 and 22.

Newly presented independent claim 33 is directed to “an implantable medical device” comprising “a housing having a dielectric portion defining an internal volume and a metal portion defining an internal volume,” “a transmitter/receiver circuit, located within the housing, including a ***ground reference connected to the metal portion of the housing***,” “a ***tissue stimulation circuit*** located within housing” and “an elongate antenna with at least one fold operably connected to the transmitter/receiver circuit and positioned within the dielectric portion.” Applicant respectfully submits that the Sekine patent fails to teach or suggest such a combination and, accordingly, that claims 33-37 are patentable thereover.

V. CLOSING REMARKS

In view of the foregoing, it is respectfully submitted that the claims in the application are in condition for allowance. Reexamination and reconsideration of the application, as amended, are respectfully requested. Allowance of the claims at an early date is courteously solicited.

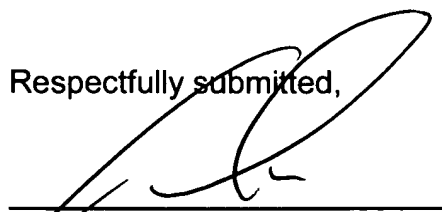
If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is respectfully requested to call applicant's undersigned representative at (310) 563-1458 to discuss the steps necessary for placing the application in condition for allowance.

The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-0638. Should such fees be associated with an extension of time, applicant respectfully requests that this paper be considered a petition therefor.

7/8/05
Date

Henricks, Slavin & Holmes LLP
840 Apollo Street, Suite 200
El Segundo, CA 90245
(310) 563-1458
(310) 563-1460 (Facsimile)

Respectfully submitted,


Craig A. Slavin
Reg. No. 35,362
Attorney for Applicant